REMARKS

In paragraphs 1-3 of the Office Action claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boner (US-3,457,370) in view of Brozovich et al (US-5,661,434, hereafter, Brozovich), stating:

> "Regarding claims 1, 3 and 11, Boner discloses an audio speaker (see Fig. 1), comprising: a speaker enclosure (inherently included for speaker pair 17 and 18); at least two drivers (speakers 17 and 18) being disposed within said enclosure; a speaker circuit (1 Oa, 20a, 22a), including: a first electrical lead (11) being engaged to a first said driver; a second electrical (12) lead being engaged to said first driver; said first electrical lead (11) being engaged to a second said driver; said second electrical lead (12) including an impedance circuit (22a) and being engaged to said second driver; said impedance circuit (22a) including a plurality of capacitors (C2, C4) being engaged in parallel. The speaker drivers 17 and 18 are electrically connecting in parallel.
>
> What's not taught by Boner is the speaker circuit including an electrical switch being engaged to shunt or bypass electrical current around the plurality of capacitors. However, shunt or bypass electrical switching circuit is old and well known in the art. Brozovich discloses an amplifier circuit (see Figs. 2a, 2b) that including the well known shunt or bypass electrical switching circuit (SW1-SW3) for controlling various impedance matching networks (30-32) to achieve efficient power control and desired impedance matching for the amplifier circuit (see also col. 3, lines 43-67). It would have been obvious to one of ordinary skill in art to modify the speaker circuit taught by Boner by including a well known shunt or bypass electrical switching circuit as shown in Brozovich, in order to achieve efficient power control and desired impedance matching for the speaker circuit."

Responsive hereto, Applicant has amended independent claims 1 and 11 to recite further limitations that are not taught by nor obvious from the cited prior art as is next discussed.

Firstly, with reference to Fig. 1 of the Application, Applicant points out that all of the capacitors of the present invention are connected in parallel with each other, but that the capacitors are not connected in parallel with a driver, as is shown in Boner Fig. 1-4. Thus, Applicant's speaker circuit is fundamentally different from that of Boner, and also that of other prior art. Essentially, Applicant's capacitors are all electrically connected within one of the electrical leads that is connected to one of the drivers. Focusing on Fig. 1 of Applicant's invention, the limitations of amended independent claims 1 and 11 are next discussed and the non-obviousness thereof in light of the prior art is thereafter discussed.

Focusing on Fig. 1 of the Application, and the limitations of amended independent claim 1, it can be seen that a first capacitor (farthest from the switch 48) can be said to be electrically connected in series within a single electrical lead to speaker driver 22, and that the remaining

capacitors are all connected in parallel with the first capacitor. Now reviewing amended independent claim 1, Applicant has amended it in a corresponding manner to describe a first capacitor that is engaged in series within the second electrical lead and the remaining plurality of capacitors are engaged in parallel with that first capacitor. The electrical switch is engaged to shunt electrical current around all of the capacitors. In this manner, claim 1 has been amended to more closely correspond to the invention depicted in Fig. 1.

Regarding amended independent claim 11, it now recites an electrical signal wire including a plurality of capacitors that are connected in parallel, including an electrical switch that is connected in parallel with the capacitors. As is next discussed, Applicant submits that amended independent claims 1 and 11 now recite limitations that are not obvious from the teachings of the prior art.

Regarding Boner '370, as can be seen in Fig. 1 thereof, each of the capacitors C1, C3, C2, C4 are electrically connected between both of the electrical leads to respective drivers. Thus, while Boner's capacitors are connected in parallel, they are not connected within a single electrical lead wire. Applicant therefore respectfully submits that amended independent claims 1 and 11 now include limitations that are not obvious from the teachings of the prior art.

Paragraphs 1-3 of the Office Action further state:

> "Regarding claims 2 and 12, the shunt or bypass electrical switch (such as SW3) shown by Brozovich is parallel to impedance matching network.
>
> Regarding claims 4 and 14, Boner discloses the values of components of elements of the impedance circuit (22a) are to be chosen as desired to the impedance to be matched (col. 3, lines 54-67). It would have been obvious to one of ordinary skill in the art to select or choose the capacitance values of the capacitors as desired (i.e., approximately the same or equal) for impedance matching.
>
> Regarding claims 5-8, and 15-17, the improved impedance circuits that including the shunt or bypass electrical switching circuit by the combinations of Boner and Brozovich would have inherently including the specific electrical signal flow or bypass property as claimed.
>
> Regarding claims 9-10, and 19-20, the claimed reduction in specific values of impedances for the speaker drive is depending on the values of components of elements of the impedance circuit (22a) are to be chosen as desired to the impedance to be match (col. 3, lines 54-67). It would have been obvious to one of ordinary skill in the art to select or choose the capacitance values of the capacitors and values of other components for the impedance circuit for specific desired impedance matching.

> For what's called for in claim 13, see Fig. 1 of Boner where capacitors C2, C4 are connected in parallel with speaker drive 18."

Responsive hereto, Applicant firstly notes that the limitations of dependent claims 12, 13, 15-18 have generally been included within amended independent claim 11, and that dependent claims 6 and 7 have been amended to further describe Applicant's invention and distinguish the prior art. With regard to the dependent claims, Applicant firstly urges that the dependent claims recite further limitations that are not obvious from the prior art, and alternatively that the dependent claims are allowable in that they depend, either directly or indirectly from an allowable base claim (amended independent claim 1 or amended independent claim 11).

In paragraph 4 of the Office Action it is stated:

> "The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Skene, McDonald, Gary, Kim et al, Wright discloses various electrical devices including different impedance control circuits."

Responsive hereto, Applicant has reviewed the further prior art and believes that the claims, as amended, recite limitations that are not taught by nor obvious from the teachings thereof.

Having responded to all of the paragraphs of the Office Action, and having amended the claims accordingly, Applicant respectfully submits that the Application is now in condition for allowance. Applicant therefore respectfully requests that a Notice of Allowance be forthcoming

at the Examiner's earliest opportunity. Should the Examiner have any questions or comments with regard to this amendment, a telephonic conference at the number set forth below is respectfully requested.

Respectfully submitted,

Dated: September 4, 2008

ROBERT O. GUILLOT
Reg. No. 28,852

IPLO®
Intellectual Property Law Offices
1901 S. Bascom Avenue, Suite 660
Campbell, CA 95008
Telephone: (408) 558-9950
Facsimile: (408) 558-9960

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September 4, 2008
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